line, the school, the library, the health care, perhaps the tourism industry, the fish and game, whatever. I don't have data for you yet. We don't know. I mean certainly look at budgets.

MS. CHONG: Well, I wanted to mention on the issue of eligibility for libraries, that unfortunately the definition of what libraries are eligible for universal service funds is set pursuant to the statute. And I think that that's something that you would need to go to your congress member about because the Commission is very limited in its discretion because of the very specific definition in the law.

MS. ELLIOTT: Commissioner, I'm not asking that the definition be extended, I'm saying in the case of joint projects. UAF, their library perfectly expects to pay regular telecommunication rates for what they do for their students. They are participating in a public access project and I'm saying for those joint projects the rate should apply.

MS. CHONG: Thank you for that clarification. That explains it. Thank you very much, that was very helpful. Do you think you could get me copies of the information on the slides?

MS. ELLIOTT: Yes, I have them there for you.

MS. CHONG: Oh, great. Well, we'll put it into the record, thank you very much.

MS. ELLIOTT: I'd like to introduce Fred Pearce,

Mr. Telemedicine in Alaska. He is the director of the Alaska Telemedicine Project and an assistant professor of telecommunications at University of Alaska, Anchorage. Dr. Pearce.

MR. PEARCE: Thank you, Commissioner and members of the APUC. Following Susan is always a treat because we always seem to be doing very similar things, just on different sides of the street. The Alaska Telemedicine Project began a couple of years ago as well and it was based on an articulated interest by a number of people around the state to try to identify some promising telecommunications and information technologies that can prove the delivery of health care to rural Alaska.

What we began with is the notation that this should be as an inclusive of a project as possible and we recognized immediately that the state is kind of trifurcated, there are three separate funding streams. So we tried immediately to bring to the table members from civilian, Native and military health care institutions and organizations in the state. The project now represents 34 health care organizations, seven telecommunication carriers and the University of Alaska. New members include the NASA, Apple Computer and Tetherless Communications from California. What we have tried to do from very early on is to recognize that this has to be a partnership and so the very first meeting we had, very first public meeting we had was with the telecomm carriers to find out if this was

in their interest and to find out how we could partner together.

The principal goals of the project have been to access the needs of health care providers throughout Alaska, but especially in rural Alaska. To demonstrate a range of appropriate and sustainable telecommunications and information technologies and then to evaluate these applications for satisfaction utilization and cross benefit. As we received word of the telecomm bill, the passing of the telecomm bill, one of the first acts we did is circulate its Section 254 to the members and I think it can be said that most of the members, in fact, if not all the members came to recognize that this was an important opportunity especially for rural health care providers.

This section, we believe, very wisely articulates and defines universal service as an evolving level of telecommunication service that's essential to education, public health and public safety. We believe that there is great sensibility in Section 254 and I think most of us who've been here a little bit and I've only been here five years has saw the invisible hand of our senior senator in this section.

Section 254 places a great deal of responsibility for advancing telecommunication services on the carriers. And it states that consumers in the regions of the nations, including these low income and those in rural, insular and high cost

areas should have access to these services. This meeting is an articulation of the mechanisms that this section has put into place. So I think we're all here, we all understand what Section 254 has done and is doing and the promise of it.

What members of the project have recognized from the beginning is that you can state all the needs you want. You can put all of your desires on the table, but the fact of the matter remains we have an infrastructure that's very odd. It developed over time and it will change over time. So what project members have tried to do is tried to take advantage of our peculiar telecommunications infrastructure and move ahead. Project members believe that we can't wait for these telecommunications to be transformed in order to begin to change. The business of providing health care for moving people to services, especially here in Anchorage to moving services and information to people. So what we've done over the last couple of years through a lot of energy and without any dedicated funding and with a lot of hard work on many people's behalf, we've implemented a number of specific operations.

Right now, through Providence Alaska Medical Center there are seven, what I would call, narrow band with teleradiology sites that are lit up and we're beginning to generate data from that. There are 16 9.6 and two 9.4 narrow band with medical information and medical imaging. Village

base provider work stations in operations and Mike Terry is in the audience and he's the person principally responsible for that out in Norton Sound. We've worked with the military, the third medical group at Elmendorf and their five ISDN based stored forward medical and health care provider work stations that are being used today. We have implemented a scalable 14.4 to 1.2 KB statewide medical and health care infamatics (ph) package with dedicated E-Mail and conferencing as well as a Lionex (ph) based web site. And we chose Lionex because you can get at this as text base, so that was one of the things we recognized as well, it's very difficult to move these files around graphically.

We've also been exploring a cross agency patient records management system, RPMS, in conjunction with the Alaska Native Medical Center as the lead agent. And, in addition, we've submitted a number of major grants in the last six months. We're just starting to get some preliminary data, for instance, from the radiology sites, but early data indicates that about 12 percent of the ordinary events, ordinary radiological events have precluded transportation to Anchorage. And that most of the people encountering this system are satisfied with this store and forward patient encounters and that transportation costs have stabilized. Preliminary feedback from the infamatic project indicates that the health care providers that are using this are very pleased with these

new information tools available to their Desktop that's designed to allow them access to things like the National Library of Medicine.

A number of future plans that we're moving forward, a wireless PDA demonstration project involving ATU Telecommunications here in Anchorage. The development of a highbred asymmetrical statewide network for distributing continuing and medical health care information and education. The demonstration of electronically-smart clinics in Valdez, Seward, Kodiak, and Khabarovsk in the Russian Far East. The development of narrow band with provider work stations in conjunction with Apple and Tetherless Communication in California. The development of wireless TCPIP networks for rural health care. And the development of medical and health care library assets and continuing medical and health care education tailored to the needs of rural Alaskan providers. That's just some of the things we've done.

We've done a number of things as well, but I think what we all recognize very early on is that we would all like to see improved service, but we recognized that this is a very difficult situation given the economics and the economy of scale in Alaska and what we are trying to do, quite frankly, is take advantage of our particular situation and try to get everybody moving in the direction that seems obvious. This is the way business is going to be done. Information and services

are going to be moved to people and people will be decreasingly moved to these services.

Thank you very much.

MS. ELLIOTT: Thank you, Dr. Pearce. Commissioner Chong.

MS. CHONG: Yes. I wanted to mention that we have established at the Commission a telemedicine advisory committee. They were put together, I guess, about six weeks ago, maybe two months by now. And we have a group of approximately 30 individuals representing doctors, hospitals, health care facilities, and the telecomm industry, both wired and wireless. They are working to provide recommendations to the joint board by mid- to late September on the core services that should be provided for telemedicine applications and recommendations on costs and comparability of rates between rural and urban. So I wanted to let people know that we have that in process and when we get the recommendations we will do what we can to have it posted on our Home Page.

I wanted to know what telecomm services that you think the joint board should recommend for the purposes of providing access for the provision of rural health care? What has your group found to be the critical core services that you would need to perform the work that you're doing?

MR. PEARCE: Well, most of our strategy has been based on two CPIP, so right now -- we were down in Kodiak last Monday

and Old Harbor, for instance, a small village some distance from Kodiak proper, the city of Kodiak, barely manages to maintain a 2.4 link. There are some anomalies built in -- I think at the highest level -- we've been moving radiological slides around in nine and 10 minutes through these projects.

By the way, I want to point out that the telecomm carriers have provided these services to date for free as part of these demonstration projects, so they have been our partners and I think they have done a terrific job. But one of the anomalies that we keep pointing back to is at 10 cents a minute, GCI's advertized rate or some comparable rate in the state, a radiological image is defacto worth 90 cents and we think that that's a very good illustration about how the whole industry is changing.

So there are very high level issues, but as I said, any improvement. The APUC has recognized as 28.8 as a benchmark for the year 2001, 9.6 I think would have to be a minimum. But again, what we've tried to do is tailor these things to what actually exists right now. So it's a very hard question. If I had my druthers, I would say, ISDN connectivity everywhere TCPIP network.

MS. CHONG: Do you have any idea of the scope of costs that you can save by, for example, sending a X-ray of a patient to a doctor and saving the cost of loading them into a float plane and sending the pilot out? Do you have any idea of the

cost that you're saving to your health care community?

MR. PEARCE: Well, Kathe Boucha, who is one of our partners will, I think address some of those issues. But if an ordinary event proves, through the transmission of a radiological image, not to require transportation and that transportation had to be an emergency E-vac, that's 90 cents roughly at 10 cents a minute versus $25,000.

MS. CHONG: It's $25,000 to do an emergency E-vac? That's a very nice statistic.

MR. PEARCE: Thank you.

MS. CHONG: Thank you very much.

MS. ELLIOTT: Thank you, Commissioner Chong. Chairman Cotten, any questions from the APUC?

CHAIRMAN COTTEN: Apparently not.

MS. ELLIOTT: Thank you. I'd like to introduce Dr. John Monohan who is the superintendent of the Fairbanks North Star Borough School District in Fairbanks, Alaska. He was previously superintendent in Iditarod School District, which is a rural district. Dr. Monohan.

MR. MONOHAN: Thank you. Commissioner Chong, and ladies and gentlemen of the APUC Board. I'm a little bit nervous, this is the first time I've ever done this and getting here early and listening to the quality of speakers earlier and looking out into the audience of some of the distinguished audience doesn't help to alleviate some of the nervousness.

But I'll just try to talk a little bit about some of the difficulties that we've experienced just from an educational perspective of trying to provide a service and to help young children and staff.

Currently, I'm the superintendent of Fairbanks North Star Borough, which probably under the direction of Mr. Cross provides, I would say, one of the most exemplary technology programs in the state. Hooking up approximately 16,000 students doing some national science foundation exemplary programs with virtual math and science classrooms over an area of probably about 73,000 square miles. Prior to that I spent six years in Iditarod on the Yukon and in McGrath working with 10 remote communities over an area of 43,000 square miles and worked to connect about 400 students.

And probably one of the reasons I'm up here is the amount of time stumbling and trying to figure out how to hookup students and I've probably made all of the mistakes in that process of trying to do that and so consequently I have learned how much I don't know about technology and how much is involved in the FCC and the regulations and how complex it can be.

Going back it's -- I'm going to jump in, I think, how important it is and I'll try to demonstrate with an example. Currently we're putting a lot of effort and emphasis and emotional talk into providing good quality role models in our classrooms, African American, Native American, Asian American

and just focusing on the Native American issue for a while, it's extremely difficult to find a sufficient number of quality educators that are in the market. And it's not that students don't have the potential to become teachers, it's just that for a variety of cultural and social reasons when they go into the university they're not successful.

And I look back and contribute a lot of that to some of what's going on in the schooling. The inability because of shrinking budgets, I think, to have some of the quality experiences that their urban counter parts are experiencing. The ability to do high quality research, to get information, to have access to information, but also to help break the mindset that they can go out and can do things. It's breaking the mental mentality and to provide a larger picture.

The schools have computers and in some cases, satellite dishes, but unless you can start interacting and you can see the big picture of the worldwide market that the students in urban America and suburban America are going to have access to, they're not going to be able to compete in the university. You know, they're dead ducks by the time they get there, it's over for them. So they have to have some reasonably comparative services, I picked that word up here, and count on some sort of connectivity that's more than, you know, 1,200 bod which on a good day is what we can get.

We've had some luck with being able to go outside of

the state and connecting to San Francisco and I guess avoiding this double hop that kills us when you try to connect any of the communities in the Iditarod area so that teachers can bring services into the classroom. There are --- I'm currently the chair of the technology committee for the superintendents association and by virtue of that have a lot of opportunity to talk to other superintendents through our association and all of them, I don't think there's probably a district that hasn't asked for some sort of connectivity so that they can do some distance delivery, they can participate in virtual math and science classrooms, take advantage of SLED, some of the services that are out there that everybody is trying very hard to participate in.

The need, the service -- well, the service is not there, but the need and the desire is there and in many of the cases and what we've dealt with is an unresponsiveness by local service providers to put in some of the mechanisms to at least, so we can connect at 24, so you can get on the -- you know, and start doing some chat lines or doing some research is not there.

There are some quality programs out there that I think are national leading programs. National Science Foundation has funded a lot of -- Native Ways of Knowing, exemplary programs that the districts would like to participate in and would involve students and would give them more of a global picture

of what's going on and making them viable. But they don't have it. I'd like to support some of the telemedicine things in the field of education. It's crucial to have students and families and communities that are healthy.

MS. ELLIOTT: Dr. Monohan, one minute please.

MR. MONOHAN: And the cost become prohibitive. And we do have an option -- you know, an opportunity here to do that. We're all faced with tough economic decisions, but what we're in now is making the hard decisions, not to create a community that has stratas in it of third world populations. I don't know if it says anything, but when I look out here and I don't see any Native American faces and we're all sitting here with suits and jackets and we can choose to send our kids to high quality schools, but I think we're creating a real problem by not looking at this in an economic and a social impact forum and I know that you do that, but I just emphasize it.

MS. CHONG: Thank you. That was very helpful.

MS. ELLIOTT: Thank you, Dr. Monohan. Commissioner Chong.

MS. CHONG: I wanted to share with you, Dr. Monohan, a little information. Every community in American wants to get on the information superhighway, schools. And one of the challenges that we found of the Commission is that many of the community does not know how to go about doing it.

One of the suggestions that we've made is to have a web

page that educators across the nation could access and share information with each other about networking their schools and how to set it up so that every community doesn't have to reinvent the wheel in this very complicated area. We're working on that right now in cooperation with the industry and some of the more advanced schools that are doing tele-education very successfully. So I wanted to put you in touch with Ira Fishman, who is our tele-education specialist at the FCC. You can E-mail him at I.Fishman, F-i-s-h-m-a-n with an I in front of it @FCC.GOV and Ira can give you lots information on the efforts in that area and what others are doing on tele-education. He's our whiz kid on that.

I also wanted to tell you that I think that a successful tele-education program involves a partnership between government, the telecomm carriers and the schools. Right now under the Telecomm Act, the government and the carriers are going to do their part to provide access to telecommunications for schools through the universal service system that the Act has put into place. But the second thing that we need to do is to make sure that schools can get computers and the inside wire and the appropriate service to the schools so that they can actually provide the service as they need it each month. And I think that is a challenge for local government and for the educators and for the states and the carriers to work together to provide that money for those

services.

And then finally, I think that school administrators need to have trained technicians at the schools, just like you have a janitor to maintain your school infrastructure, the physical part, you need technicians that can maintain your telecomm and computer infrastructure and can keep it advancing and keeping up with technological advances. And that also costs money and must be budgeted for by the educators. I wanted to add that there are efforts in the industry to provide low cost educational computers.

For example, I was visiting Apple a few months ago and they are developing a very low cost, $500 wireless computer to make available to students that would be able to do a number of simple functions, download homework from teachers and it will be very durable, you can throw it around, you know, it's made for kids first grade through seventh grade so that kids can get excited about computers and it would be a very low cost device. So I just wanted to say a lot of people right now are focusing on these issues and I think we're going to make a lot of progress in the next few years on it.

But keep up the good work. Thank you.

MS. ELLIOTT: Thank you, Commissioner Chong. Chairman Cotten.

CHAIRMAN COTTEN: (No audible response)

MS. ELLIOTT: Thank you, Dr. Monohan. I'd like to

introduce Kathe Boucha-Roberts who is the project manager for Providence Hospital Health Systems in Alaska and if Fred Pearce is Mr. Telemedicine, Kathe Boucha-Roberts is Ms. Telemedicine.

MS. BOUCHA-ROBERTS: Thank you. This isn't what I was going to be when I grew up so I'm still surprised I'm here. Consumers want health care services at a low cost and a high quality as consumers want other services. Policy makers want to regulate or at least provide incentives in order to establish telemedicine as a system and as a tool to deliver universal health care.

The problem at hand in the increasingly freeform communications and computer market place is how to achieve specific health care service goals, like telemedicine. Those trying to develop telemedicine projects such as we have done here in Alaska with the Alaska Telemedicine Project have to rely on the telecommunications providers' expertise to deal with the incredibly cumbersome tariff system that remains in place. The vendors continue to dictate what products and services are available and at what prices with little reference to the economies of health care.

My position is that the best way for a government to advance telemedicine is through the current regulatory environment and to deal with the unequal market place and to assist in the creation of consumer driven entities like the Alaska Telemedicine Project.

One of health care organization strategies and certainly Providence Health System's strategies is to reach out to other potential telecommunication users at the regional sites to cost share and to coordinate partnerships for survival. In the health care industry nationwide, major medical centers are being asked to take responsibility for the delivery of health care in small rural community hospitals and you see that happening here in Alaska also. But in order to be able to meet the needs of the rural community hospitals and the economies in health care that are forced on the local community governments, the telecommunication charges for delivering health care services have to be addressed. We can't be successful in the acquisition of providing health care in the rural communities unless we find an affordable way to deliver the services.

There truly are regulatory and institutional obstacles to the rational development of telemedicine and certainly in Alaska. In order to make new health care services effective, carriers must lower the transmission costs and make them consistent and understandable. Technologies must be fully deployable, then should be available on demand and all players must standardize connections in communication methods. Telemedicine merits relaxed treatment. We are all health care consumers. We all subsidize health care costs. Affordable telecommunication services benefits us all as health care

consumers because we all subsidize health care.

The difference between the full cost and the charge for services or telecommunication costs could be made up by universal service support and health care's involvement in the deliverance of universal service. The health care rationale for the reduced charges is obvious, to deliver better services at lower costs. The regulatory and economies justification for a partially subsidized process is simple to develop a new and needed business to support the economies and the survival and the advancement of telemedical services throughout rural Alaska. There's too much at stake for parochial prejudices.

Companies need to get together and on some of these matters to influence the state and federal laws. And that's part of why we put the Alaska Telemedicine Project together. We need to promote and advance public services to justify the changes that are taking place in both industries. I think Fred gave a particularly thorough overview of some of the telemedical activities that are taking place within Alaska. The consequence that we face right now is that when the generosity of the telecommunications companies is over, when we finish this demonstration, period. If we continue on as we are right now with the charging system that we're faced with, we will not be able to continue the delivery of telemedical services, it will bring it to a halt. And so the benefits that we're experiencing currently with the systems that we've put in

place are only possible because of the generosity of the telecommunication companies. The charges that we'll be faced with when that demonstration period is over aren't affordable to continue the work. And so the cost benefits analysis that we're putting together to provide the information that the state has requested will not be able to continue. It's unaffordable for the rural health care communities to pay the charges and it's unaffordable for Providence to charge them administrative overhead to reimburse ourself for those charges. So we're not going to be able to continue in the work.

I appreciate your consideration of that dilemma.

MS. ELLIOTT: Thank you, Kathe. Commissioner Chong.

MS. CHONG: Well, how do we skin this cat, Kathe? You're telling me on the one hand, I hear from the panel that you save a lot of money in health care costs by using the telemedicine applications. On the other hand, you also tell me that once this demo is over, for example, you won't be able to continue the service because you don't have the money for the telecomm costs.

MS. BOUCHA-ROBERTS: It's not really the savings of dollars that you can sort of pocket as much as the spending of health care dollars smarter. And the increased quality of the delivery of health care that urban consumers are accustomed to to the rural areas.

MS. CHONG: And what discussions have you had with the

local carriers here as to improving the infrastructure for delivery of higher quality telecomm services that would fit your need?

MS. BOUCHA-ROBERTS: I think that we've had, over the past year or year and a half, considerable discussions in relationship to what health care needs, what is affordable. And all of the health care providers have risen to the occasion to express their individual needs. At this point, if we face the tariffs and the charging system that we're accustomed to living with in Alaska, but we're trying to implement and deploy new services and new technology, we're facing complications. And so at this point I think we're all listening and learning.

I'm personally just waiting for decisions to be made at the regulatory level and for the Telecommunications Bill to be interpreted and the applications of those interpretations to see what we're left with.

MS. CHONG: The Act asks us to make available to health care providers in rural areas comparable rates from urban to rural. Do you have any ideas or suggestions about how we should establish the reasonably comparable rate? Does it make sense in Alaska to look at the Anchorage or Fairbanks rates to apply them outwards or do you think the challenges of Alaska, in terms of its remoteness from the rest of the Lower 48 make this a unique circumstance?

MS. BOUCHA-ROBERTS: I think it's a unique

circumstance, but I think that looking at the rates in Anchorage is a good square one to begin with. I've been spending time watching what other states who are more advanced than we are in this area are doing and some of them are sharing their state networks, which is not one of the suggestions I'm making here. Some of them are subsidizing it through other state funding. Some of them have given subsidies to the telecomm companies that are then passed off to the health care providers. Some are providing contracts for reduced costs that are a capitated situation. And so I think that there is a tremendous amount of creativity in the Lower 48 that we can keep our eyes on.

It's not my position to make too many serious recommendations, because I don't really know the economies of the telecommunications companies and what they need to survive either. I think the important thing is that we're working together and we're listening to what we need for each of us to be able to build out this system of universal health care as we've been mandated to do in an affordable way. We're all paying out of one pocket or another anyway.

MS. CHONG: Now, do you or Dr. Pearce know whether anyone from the Alaska telemedicine community filed in our universal service proceeding docket?

MR. PEARCE: Yeah, I don't believe.....

MS. BOUCHA-ROBERTS: We didn't.

MR. PEARCE: .....we did, yes, okay. Steve Sybeski and Rich (indiscernible - cutting in and out) filed.

MS. BOUCHA-ROBERTS: Did you, oh, thanks.

MS. CHONG: Great.

MS. BOUCHA-ROBERTS: Okay.

MS. CHONG: I wanted to give you our telemedicine contact at the FCC just as I gave the tele-education person a minute ago. The gentleman we have working on our telemedicine project is Elliott Maxwell and you can E-Mail him at EMaxwell; M-a-x-w-e-l-l @FCC.GOV. Elliott is in charge of our telemedicine advisory committee and would be a very good contact to stay in touch with in the future. Thank you.

MS. ELLIOTT: Thank you, Commissioner Chong. Chairman Cotten.

CHAIRMAN COTTEN: Apparently not.

MS. ELLIOTT: Thank you. I'd like to introduce Dave Fauske who is the General Manager of Arctic Slope Telephone Association.

MR. FAUSKE: Thank you. Commissioner Chong, Mr. Gonzalez, welcome to Alaska, thank you for coming. I'm the manager of Arctic Slope Telephone Co-Op which serves the area north of the Brooks Range in Alaska, approximately 92,000 square miles with eight traditional communities, one of which is served by GTE Alaska. And we also serve Prudhoe Bay, Deadhorse, a portion of the Alyeska Pipeline. So we have an

interesting co-op where we have subsistence hunters who are subscriber owners along with their one vote, ARCO, BP Exploration and other major oil companies.

I majored in philosophy or one of my majors and so serendipity always delights me. I was on the other panel until shortly before this event and I've been moved to this one. The serendipity part is that I came to Alaska to teach. My wife and I got off the plane in Barrow in 1968 and as a family remained there about 16 years and I lived there about 21. My wife still teaches so she's more consistent reliable than I am. In fact, I left her at home this morning as a teacher entering her 34th year of early elementary education working on her third self training project on her Mac that she took home for the summer just to keep up with the kids.

I'd like to just briefly bridge a little bit of the last panel to this panel relative to telehealth, distance education and perhaps broadening it out a bit to telework or telecommuting. I'd like to describe -- in order to do that, the nature of our service community and to briefly describe how we are structured to serve that community, the North Slope and then finally what our problem is. The nature of our service community and I don't want to repeat what's been said before, is we're not linear, we're not in Montana or North Dakota where there's farms strung out along highways with small towns and the farmers and the people in the small towns call each other

and need to have lots of local calling.

In fact, what we are is not local calling focused, particularly, according to the national statistics. In fact, local calling in the villages largely takes place on CB. I was having dinner at a resident's house in the village of Wainwright a few years ago and his wife jumped up from the table and said, oh, I forgot to tell the kids about choir Christmas practice and I said, can I help do any contacting and she said, no, just a minute and she took the CB mike off the refrigerator and said, kids don't forget practice at 7:00 and she had told the entire community of Wainwright. It's a cultural aspect. Our communities are insular, they're pods of people separated by distances not connected by highways. And so there's little interoffice terrestrial traffic.

Now, how are we structured to serve that community? Our co-op and along with, I think, a great majority of like offices and companies in the state have digital switches of a very recent genetic -- generic level. We have high penetration taking into the account the use of both CB and VHF in the communities. We coexist with a fairly modern coaxial communications plant which provides cable television, usually at least a dozen channels if not more, but TV receive only. We have a very recent vintage copper plant, none of which exceeds the 18 killafoot limit of HDSL and ADSL using copper optics as it's been coined by (indiscernible - cutting out). And we have

a subscriber owned cooperative that's not a profit business. And has recently exercised the option to become deregulated under Alaska statute in order to meet the challenge that's been put before it by the Telecommunications Act and the FCC's orders.

We are involved in supporting a tele-education project at the North Slope Borough School District and the borough have implemented. A video two-way interactive project. We are involved in supporting the telehealth equipment that's in the clinics in every village. We are involved in supporting a distance management and community public access teleconference centers that exist in every village. All of these having existed since the mid- to late '80s and early '90s. And we are involved in supporting to do E911 and additional telework using the teleconference centers and those technologies to provide the relocation of jobs focused in Barrow out to the villages of the North Slope Borough.

So what's the problem? The problem is we're all dressed up with no place to go. The information superhighway analogy which may be a bit worn by now, I'll invoke again, I'm sure we've all seen pictures, there was one in a Seattle paper a few years ago of an onramp or an offramp as part of the I5 inter-exchange in South Seattle, which for some engineering or financial or political fluke was terminated and so we had the interesting aspect of this beautiful ramp launching out and